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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,287	06/29/2004	Shinichi Sasaki	042424	5209

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EXAMINER	
CHEN, WEN YING PATTY	
ART UNIT	PAPER NUMBER
2871	

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/500,287	SASAKI ET AL.	
	Examiner	Art Unit	
	W. Patty Chen	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 June 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Jun. 5, 2006 has been entered.

Response to Amendment

Applicant's Amendment filed Jun. 5, 2006 has been received and entered. Claims 10 and 112-15 are cancelled per the Amendment filed. Therefore, claims 1-2 and 4-9 are now pending in the current application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

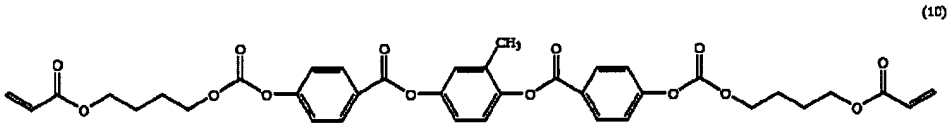
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arakawa et al. (US 6400433) in view of Hashimoto (US 6657690) further in view of Meyer et al. (US 6773766; which is a continuation of 09/857216 filed on Jun. 22, 2001).

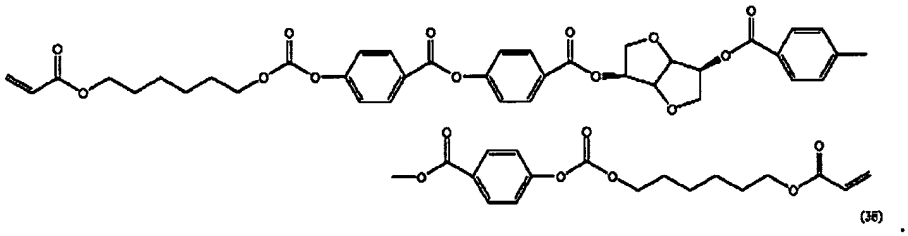
With respect to claim 1 (Amended): Arakawa et al. disclose in Figures 6-8 a polarizing plate comprising: a polarizing layer (element P) and an optically compensating layer, wherein the optically compensating layer comprises an optically compensating A-layer (element B) comprising a polymer film (Column 7, lines 47-48), and an optically compensating B-layer (element A) comprising a cholesteric liquid crystal layer (Column 7, lines 41-41 and Column 20,

lines 32-35) and further disclose in Column 4 lines 64-66 that the optically compensating A-layer meets requirements indicated by the formulae: $20nm \leq Re \leq 300nm$, where Re = (nx-ny)*d.

Arakawa et al. fail to specifically disclose that the optically compensating A-layer meets the requirement that $1.2 \leq Rth/Re$, where Rth = (nx-nz)*d and further that the cholesteric liquid crystal layer is formed from a liquid crystal monomer represented by the chemical formula:



and a polymerizable chiral dopant represented by the chemical formula:



However, Hashimoto discloses in Column 7 lines 46-52 an optically compensating layer made of a polymer film having the characteristics of $20nm \leq Re \leq 300nm$ and $1.2 \leq Rth/Re$ (wherein Re is in the range of 20nm~200nm and Rth is in the range of 70nm~500nm) and Meyer et al. disclose in Column 11 line 65 through Column 18, wherein a cholesteric liquid crystal layer comprises of liquid crystal monomer and a polymerizable chiral dopant having the chemical formula shown above.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a polarizing plate as taught by Arakawa et al. wherein the optically compensating A-layer having the retardation as taught by Hashimoto, since Hashimoto teaches that such compensating layer with the specified retardation values minimizes lateral

fluctuation thus helps to optically compensate the display image more evenly (Column 7, lines 27-45) and wherein the cholesteric liquid crystal layer comprises of liquid crystal monomer and a polymerizable chiral dopant having the chemical formula as taught by Meyer et al., since Meyer et al. teach that such cholesteric liquid crystal layer exhibits excellent optical properties such as wide range of light reflection property (Column 12, lines 36-42).

As to claim 5: Arakawa et al. further disclose in Figure 6 that the polarizing plate with optical compensation function further comprising an alignment layer (element O).

As to claim 6: Arakawa et al. further disclose in Column 7 lines 47-53 that the polymer film is a stretched film.

As to claim 7: Arakawa et al. further disclose in Column 25 line 52 through Column 26 line 34 that a pressure-sensitive adhesive layer is arranged on one of the surfaces of the polarizing plate.

As to claims 8 and 9: Arakawa et al. disclose in Figure 8 an image display comprising a liquid crystal cell (element LC) and a polarizing plate (elements P, A and B combined) arranged on at least one surface of the liquid crystal cell.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arakawa et al. (US 6400433), Hashimoto (US 6657690) and Meyer et al. (US 6773766; which is a continuation of 09/857216 filed on Jun. 22, 2001) in view of Nishikawa et al. (US 6685998).

Arakawa et al., Hashimoto and Meyer et al. disclose all of the limitations set forth in the previous claims, but fail to specifically disclose that an angle formed by an absorption axis of the

polarizing layer and a slow axis of the optically compensating A-layer (the anisotropic layer made of a polymer film) is not smaller than 85° and not larger than 95°.

However, Nishikawa et al. disclose in Column 4 lines 1-21, Column 5 lines 57-61 and Column 6 lines 3-14 that since the slow axis of optically compensating layer made of liquid crystalline is perpendicular to the rubbing direction of optically compensating layer made of polymer; the rubbing direction of the polymer layer is parallel to the slow axis of polymer layer; and that the absorption axis of the polarizing layer is parallel to the slow axis of liquid crystalline layer, therefore, the absorption axis of the polarizing layer is perpendicular (forming a 90° angle, which is not smaller than 85° and not larger than 95°) to the slow axis of the polymer layer.

Therefore, it would have been obvious at the time the invention was made to construct a polarizing plate as taught by Arakawa et al., Hashimoto and Meyer et al. wherein an angle formed by an absorption axis of the polarizing layer and a slow axis of the optically compensating A-layer (the anisotropic layer made of a polymer film) is not smaller than 85° and not larger than 95° as taught by Nishikawa et al., since Nishikawa et al. teach that such orientation of the compensating layers with respect to the polarizing layer results in an optical compensatory film having high productivity (Column 4, lines 1-21).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arakawa et al. (US 6400433), Hashimoto (US 6657690) and Meyer et al. (US 6773766; which is a continuation of 09/857216 filed on Jun. 22, 2001) in view of Suzuki et al. (US 6580483).

Arakawa et al., Hashimoto and Meyer et al. disclose all of the limitations set forth in the previous claims, but fail to specifically disclose that a selectively reflection wavelength range of the cholesteric liquid crystal layer is in a range not larger than 350nm.

However, Suzuki et al. teach in Column 1 lines 66-67 and Column 2 lines 1-4 the use of a cholesteric liquid crystal film wherein a selectively reflection wavelength range of the film is between 30nm to 150nm, which is not larger than 350nm.

Therefore, it would have been obvious at the time the invention was made to construct a polarizing plate as taught by Arakawa et al., Hashimoto and Meyer et al. wherein the cholesteric liquid crystal film has the property as taught by Suzuki et al., since Suzuki et al. teach that having the specific selectively reflection wavelength range helps to improve visibility of a display device (Column 1, lines 61-61).

Response to Arguments

Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

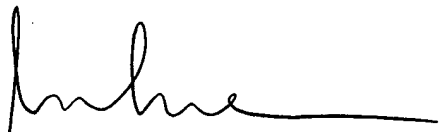
Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Patty Chen whose telephone number is (571)272-8444. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

W. Patty Chen
Examiner
Art Unit 2871

WPC
8/11/06



DUNG T. NGUYEN
PRIMARY EXAMINER